

### ABSTRACT

A method and system for automatically setting output power levels of optical transmitters in an optical communications arrangement. The optical communications arrangement includes at least a first and a second node, wherein the transmitter of the first node is optically coupled to a receiver in the second node, and the transmitter in the second node is optically coupled to a receiver in the first node. Respective sequences of power-level messages are transmitted from the transmitters to the receivers. Each power-level message indicates an output power level used by the transmitter to transmit the message, and each power-level message in a sequence is transmitted at an increasing power level. The power levels at which the power-level messages are received by the receivers are detected, and when a receiver receives a power-level message at a power level that satisfies a selected power level, the output power level of the coupled transmitter is automatically set to the output power level indicated in the power-level message.